

**ANALYSIS OF DEFINITION OF TERMS IN APPLIED LINGUISTIC
EMPIRICAL STUDIES IN RESEARCH ARTICLES BY NON-NATIVE
ENGLISH SPEAKERS SCHOLARS IN MALAYSIA**

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Statement of Originality

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ABSTRACT

ANALYSIS OF DEFINITION OF TERMS IN APPLIED LINGUISTIC EMPIRICAL STUDIED IN RESEARCH ARTICLES BY NON-NATIVE ENGLISH SPEAKERS SCHOLARS IN MALAYSIA

Chieng Yen Yong

The aim of this study is to identify the definition of terms (DT) used in fifty research articles (RA) by non-native English speakers (NNES) scholars. The objectives of the study are: (1) identify frequency of definition of terms in each research articles; (2) identify the types of definition of terms; (3) identify the sections of research articles where the definition of terms appear; (4) determine whether the terms are defined by referring to authoritative source or not; and (5) identify the linguistic features for defining terms. Selection criteria of the fifty RA is based on empirical study, English-language related studies, literature related studies or linguistic related studies and published in seven Malaysian journals written by non-native English speaker scholars. The case study is employed in studying the particular section of definition of terms. The samples of fifty RAs were collected using corpus compilation. There are four types of definition of terms identified in the study: details to show what is a term or concept (n=133, 61.0%), operational definition (n=44, 20.2%), giving components to describe what a term or concept is (n=23, 10.6%) and equivalent terms (n=21, 9.6%). Four sections in the RAs where definition of terms appeared are the Introduction section (n=156, 71.6%), Methodology section (n=22, 10.1%), Results and Discussion section (n=34, 15.6%) and Conclusion section (n=6, 2.8%). The terms are used to define by referring to both authoritative source (n=102, 46.8%) and without referring to any source (n=116, 53.2%). Linguistic features use for defining terms are details to show what a term or concept is (n=98, 58.3%), operational definition (n=33, 19.6%), giving components to describe what a term or concept is (n=21, 12.5%), and equivalent term (n=16, 9.5%). The study is useful as a reference to ESP teachers who are interested to carry out the ESP course for NNES researchers.

ABSTRAK

ANALISIS KATA DEFINASI DALAM LINGUISTIK PENGKAJIAN EMPRIKASI DALAM ARTIKEL PENGKAJIAN DITULIS OLEH SARJANA BUKAN PENGUNAAN INGGERIS SEBAGAI BAHASA IBUNDA

Chieng Yen Yong

Kajian ini bertujuan untuk mengidendifikasi kata definasi yang digunakan dalam 50 artikel pengajian bagi pengguna Inggeris bukan sebagai bahasa ibunda (NNES). Objektif kajian ini adalah untuk (1) identifikasi kekerapan kata definasi dalam setiap artikel pengkajian; (2) identifikasi jenis pengunaan kata definasi; (3) identifikasi bahagian artikel pengkajian di mana penggunaan kata definasi wujud; (4) mengenalpasti sama ada kata yang didefinasikan merujuk kepada sumber sahih atau tidak; dan (5) indentifikasi sifat lingustik bagi kata definasi. Kriteria pemilihan 50 artikel pengkajian (RA) adalah berdasarkan pengkajian empirikal, kajian yang berkaitan dengan Bahasa Inggeris, sama ada ia berkaitan dengan sastera ataupun lingustik, dipublikasikan dalam 7 jurnal di Malaysia dan ditulis oleh bukan pengunaan Inggeris sebagai bahasa ibunda. Kes kajian dijalankan di seksyen tertentu dalam kata definasi. Lima puluh contoh artikel pengkajian adalah menggunakan pengumpulan kurpus. Terdapat 4 jenis kata definasi yang dikenalpasti dalam kajian ini: penelitian dalam kata definasi ataupun konsep (n=133, 61.0%), definasi operasional (n=44, 20.2%), komponen yang digunakan dalam penjelasan kata atau konsep (n=23, 10.6%) dan kata sama (n=21, 9.6%). Terdapat 4 bahagian dalam artikel pengajian (RA) di mana kata definasi wujud di bahagian Pengenalan (n=156, 71.6%), bahagian Metodologi (n=22, 10.1%), bahagian Keputusan dan Perbincangan (n=34, 15.6%), dan bahagian Kesimpulan (n=6, 2.8%). Kata yang digunakan dalam medefinaskan kedua-dua sumber sahih (n=102, 46.8%) dan tanpa merujuk kepada mana-mana sumber (n=116, 53.2%). Sifat lingustik yang digunakan dalam kata definasi bertujuan untuk menelitikan penggunaan kata ataupun konsep adalah (n=98, 58.3%), definasi operasi (n=33, 19.6%), komponen yang digunakan untuk menjelaskan makna kata ataupun konsep (n=21, 12.5%), dan kata sama (n=16, 9.5%). Pengajian ini amat berguna kepada pengajar ESP yang berminat untuk mengendalikan kursus ESP kepada pengguna Inggeris bukan sebagai bahasa ibunda.

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LIST OF ABBREVIATIONS

A	Article
RA	Research article
NNES	Non-native English Speakers
NES	Native English Speakers

CHAPTER 1

INTRODUCTION

This chapter includes the background, purpose and objectives, significance, operational definition of terms and the scope of study.

1.1 Background of the study

Research is a way of discovery which involves a way of asking questions and finding answers to solve a mystery (Arkian & Macheski, 2006, p. 5). They view that research is a way of supporting a thesis (p. 29). It is conducted methodically to establish and hence explain the thesis. Research shows to readers where researchers obtain this information. In other words, research is any sort of “careful, systematic, patient study and investigation in some field of knowledge, undertaken to discover or establish facts and principles” (Fraenkel & Wallen, 2003). Thus, it can be said that not everybody who does research write thesis but they write research reports.

A research report is “a completed study that reports an investigation or exploration of a problem, identifies questions to be addressed, and includes data collected, analysed, and interpreted by the researcher” (Creswell, 2002, p. 289). Therefore, exploration on the study will be revealed to the intended readers. Ary, Jacobs and Razavieh (1990) state that the results report is important and is valued in a research project. This is because the procedures involved in writing a research report is for researchers to communicate “both the procedures and the findings of the research and also discusses the implications of the findings and their relationship to other knowledge in the field” (p. 492). This indicates that research studies that have been made are essential to the public in a research report. Research reports can be presented in the form of a thesis or dissertation, a journal article, or paper to be read at a professional meeting (Gay, 1992, p. 542). It is revealed that the content of these research reports are similar but they are divided into sections or chapters depending on its form.

The purpose of a thesis or dissertation is to “demonstrate a student’s competence and requires a full setting forth of the related research, complete description of the procedures, complete tabulation of results, and reflective elaboration” (Ary, Jacobs & Razavieh, 1990, p. 499). Therefore it is to “explain and define the topic, analyse the specific issues and persuade the reader with the weight of your evidence” (p. 14).

On the other hand, conference papers are the papers submitted and/or presented at a conference. The focus of the papers presented at professional meetings is on sharing new knowledge and research findings. The members present a brief informal summary of the study, emphasizing results, conclusions and any other important aspects of the study in the neighbourhood of 10 minutes. One will get some great feedback at the meetings through questions or comments that can be incorporated into the larger article when it is written (Healey, 2008).

The journal paper includes manuscripts published in scholarly journals. A journal article is similar to a thesis or dissertation in contents and format but it is

much shorter because it requires only communication of the author's contribution to knowledge (Ary, Jacobs and Razavieh, 1990, p. 499). It demonstrates an in-depth understanding of contents on how its results whether numerical or descriptive relate to the theories (p. 499). The title is required in the journal paper. Apart from that, the section of introduction "describes primarily those studies that are related to the hypothesis of the study" (Gay, 1996, p. 552). The method section also describes the subjects, instruments, design, and procedure but in less detail. The discussion section does not require too much revision. An abstract which acts as a summary is in between 100 and 150 words and is submitted on a separate sheet.

In recent years there has been a growing interest in the study of academic writing. An increased attention has been given to thesis and dissertation writing in the ESP literature. It discussed the analysis and teaching of various aspects of thesis and dissertations across a number of different disciplines (Belcher 1994 as cited in Paltridge, 1997; Dudley-Evan 1986; Hopkins and Dudley-Evan 1988; James 1984; Richard 1988; Shaw 1991; Swales 1990). Paltridge (1997) discussed about thesis proposal as an important part of that process aims to assist ESL students in preparing thesis and dissertation writings. In his another research (2002), he had explored the organization and structure of theses and dissertations concur with what happened in actual practice.

Rubdy (2004) had provided an excellent theoretical and data-rich induction into some of the major approaches and issues that is crucial in understanding and producing research in English language studies. In Allison, Lewkowicz and Nunan (1998) research, they discussed the development of a dissertation to help ESL students who are required to present dissertation in English. Brett (1994) presented the communicative categories or "moves" from the discipline of sociology found in the Results sections. Samraj (2002) aimed in the research introductions from two related fields, Wildlife Behaviour and Conservation Biology using Swales' Create-A-Research-Space (CARS) model. Hyland (2004) had examined the generic structure of the acknowledgements written by non-

native speakers of English in a variety of disciplines at five Hong Kong universities. Martin (2003) had investigated the rhetorical variation between the research article abstract written in English for international journals and those written and published in Spanish journals in the area of experimental social sciences. Moore (2004) offered a comprehensive overview of research in EAP: to specific studies, to findings from a range of studies, or to an overview of research into a particular area.

As pointed by Anthony (1999), whose purposed was to test the CARS model, found that the authors in the field of software engineering provide “definitions of important terms and examples to illustrate difficult concepts.” Researches were done on the analysis of introduction, abstract, results, discussion section. However, there were hardly found on the analysis of definition of terms. For this reason, it would be motivated to find out the definition of terms in the RA. The current study will examine the explicit definition of terms in applied linguistic empirical study written by scholars in Malaysia.

1.2 Purpose and objectives of the study

The purpose of the study is to find out the definition of terms used in applied linguistic empirical study research articles (RA) by non-native English speakers (NNES) in Malaysia.

The specific objectives were to:

- i. identify the frequency of definition of terms in each RA
- ii. identify the type of definition of terms
- iii. identify sections of the research articles where the definition of terms appear
- iv. determine whether the terms are defined by referring to authoritative source or not
- v. identify the linguistic features for defining terms

1.3 Significance of the Study

The study is significant because it could be useful for research writing course. The results may reveal the definition of terms as used by NNES. Thus, researchers will understand the type of definition of terms normally used and may help in their writing up the research papers.

The examining of the particular section of definition of terms may help the novice researchers to understand the definition of terms in deciding which sections should be allocated to produce quality research articles and whether definition of terms should be referred to any source or not.

1.4 Operational Definition of Terms

The terms of definition of terms, research articles, authoritative source and section of RA are defined based on the aim and objectives of the study.

1.4.1 Definition of Terms

Definition of terms is defined as “how you want to measure, observe, or document the variable.” In other word, definition of terms is an operational definition which “explained the specification of how the variable will be defined and measured (assessed) in a study” (Creswell, 2002). For the purpose of the study, the type of definition of terms is identified. In this study, there are four types of definition of terms, the equivalent term, giving components to describe what a term or concept is, operational definition and details to show what a term or concept is.

Equivalent terms are synonymous (adapted from Tuckman, 1994). For example: In addition to consistency, the feedback obtained in a *web-based* or *virtual* classroom is more immediate than that in a *traditional* or *conventional* classroom (Mohamed & Dzakiria, 2005) - A31.

Giving components to describe what a term or concept is (adapted from Coffey, 1987) is a term that consists of parts. For example, “The metacognition strategies can be classified into five primary components: (1) preparing and planning for learning, (2) selecting and using learning strategies, (3) monitoring strategy use, (4) orchestrating various strategies, and (5) evaluating strategy use and learning” (Mohamed, Chew & Kabilan, 2006) - A7.

Operational definition of terms (adopted from Creswell, 2002) is “the specification of how variables will be defined and measured or assessed in a study.” For example: “In this study, ‘perceive’ **refers to** how the students of Sultan Salahuddin Abdul Aziz Shah Polytechnic regard their English Language lecturers’ teaching styles” (Razak, Ahmad & Shah, 2007) - A28.

Details to show what a term or concept is (adapted from Tuckman, 1994) is a term that explained the meaning of the term explicitly. For example: “Cook (1991) described the word ‘style’ as referring to the element of fashion and changeability in teaching” (Razak, Ahmad & Shah, 2007) - A28.

1.4.2 Research Article

Research article is “a research report for publication in a professional journal (Gay, 1996, p. 551). For the purpose of study, journal articles are referred to the fifty research articles written by scholars that are found in seven journals in Malaysia.

1.4.3 Authoritative source

Authoritative source is researchers accepted “someone who has had experience with the problems and other source of expertise” as truth (Ary, Jacobs & Razavieh, 1990, p. 5). In this study, authoritative source is referred to whether the definition of terms in the fifty research articles is quoting from others’ work as researchers’ reference. For example, “Florez (1998) defines the segmental as the

basic inventory of distinctive sounds and the way that they combine to form a spoken language” - A19. This source is taken from authority for defining term.

1.4.4 Section of Research Article (RA)

Section of Research Article (RA) follows a traditional form which involves the introduction, the procedures, the findings, and a discussion in a qualitative scientific structure (Creswell, 2005, p. 266). This study describes the section of Research Article (RA) as division of the main body of the research report into four sections: introduction, method, results and discussion and conclusion.

1.5 Scope of the Study

The study is to analyse the section of definition terms in fifty RAs by scholars in Malaysia. Therefore, research articles written by native English speakers (NES) will be automatically omitted. There will be no inclusion of comparison between the definition of terms written by NNES and NES from English speaking countries.

The experience of writing, the linguistic competency of English language, age, gender and bilingualism or multilingualism of the authors will not be examined because all journal articles were acceptable for publication. The goal of the study is to find out the definition of terms used by NNES.

This chapter had covered the background, purpose and objectives, significance, operational definition of terms and the scope of study. The following chapter will cover the discussion of related studies to the operational definition of terms.

CHAPTER 2

LITERATURE REVIEW

This chapter comprises the purpose of doing research, research reporting, descriptions of a thesis, a journal article and a conference paper, importance of having the definition of terms as well as the descriptions of conceptual and operational definition of terms.

2.1 Research

Research is a “systematic inquiry designed to further our knowledge and understanding of a subject” (Hult, 2006, p. 2). Therefore, it is “a more organized activity that is directed toward discovery and the development of an organized body of knowledge” (Best & Kahn, 1989, p. 20). “Asking questions” and “solving a mystery” are focal points in doing the research (Arkian & Macheski, 2006). Hult (2006) further describes research as

You [researcher] seek to discover information about people, objects, and nature; to revise the information you [researcher] discover in light of new information that comes to your [researcher] attention; and to interpret your [researcher] experience and communicate that interpretation to others. (p. 2)

It concludes that research is “a process of searching repeatedly, researching for new insights and a more comprehensive, cohesive, ‘elegant’ theory’ and ‘advance our knowledge, getting closer to ‘truth’” (Brause, 2000). Information collection made is to make judgments and gain truth in the research (Dees, 2000). He explains that “its content will focus upon a topic” and “brings researchers own intellectual curiosity to study” (p. 13).

2.2 Research Reporting

A research report is “a completed study that reports an investigation or exploration of a problem, identifies questions to be addressed, and includes data collected, analyzed, and interpreted by the researcher” (Creswell, 2002, p. 289). Gay (1996) points out all research reports contain a statement of the problem, a description of procedures and a presentation of report that follow a conventional pattern of style and form in academic circles.

2.2.1 Thesis

A thesis or dissertation “demonstrates a student’s competence and requires a full setting forth of the related research, complete description of the procedures, complete tabulation of results, and reflective elaboration” (Ary, Jacobs & Razavieh, 1990, p. 499) in a particular field (Best & Kahn, 1989).

Front matter of a thesis consists of title page, acknowledgment page, table of contents, list of tables and figures. The title page contains the title of the report, the author’s name, the degree requirement being fulfilled, the name and location of the college or university awarding the degree, the date of submission of the report, and signatures of approving committee members (Gay, 1996). The title is

brief and concise between 10 and 12 words and describes the purpose of the study (Ary, Jacobs & Razavieh, 1990; Best & Kahn, 1989; Gay, 1996). The major independent and dependent variables is indicated in the title and intended population is described (Gay, 1996; Ary, Jacobs & Razavieh, 1990).

In the acknowledgment page, appreciation is showed to persons who have contributed significantly to the completion of the report.

The table of contents displays major sections and subsections in pages.

The list of tables and figures is presented on a separate page. Title of each table and figure and the page on are numbered. Every entry listed in the table of contents is identical to headings and subheadings in the report. Table titles and figure titles is also the same titles that are in the actual tables and figures in the report (Gay, 1996).

The abstract is on page 2 of the research report and describes the study in 100 to 150 words. “The problem under study, characteristics of the subjects, the procedures used, the findings of the study, and the conclusions reached by a researcher” are included as a summary in the abstract (Best & Kahn, 1989; Gay, 1996).

The actual body of thesis consists of namely, introduction, method, results and discussion. A new page is begun with the introduction section and has three components (Best & Kahn, 1993, p. 65). A clear and definite problem statement is found in the first component that indicates the need for the research in terms of theory and practice. It also comprises the background of the problem and significance of the problem (Gay, 1996, p. 546). The second component is literature review related to the problem is described and “logically connect the previous body of literature with current work” (Best & Kahn, 1993, p. 65). The final component of the introduction includes clear hypotheses, clearly describing

definitions of the variables, and a formal statement of each hypothesis (Best & Kahn, 1993, p. 65).

This continues with the method section which describing the investigator did (Best & Kahn, 1993, p.65). This section is necessary because readers will able to “determine how appropriate the procedures were and how much credence to give the results” (Best & Kahn, 1993, p. 65). The subsections: subjects, instruments, design, procedure, assumptions and limitation are described in the Methodology section (Gay, 1996, p. 547).

A description of subjects is the specified description of the population from which “the sample was selected and the method used in selecting the samples” (Gay, 1996, p. 547). Meanwhile, the description of instruments describes “all instruments used to collect data pertinent to the study” by tests, questionnaires, interview forms or observation forms and “relates the function of the instrument in the study, what the instrument is intended to measure, and data related to validity and reliability” (Gay, 1996, p. 547). The procedure section “describes each actual step followed in conducting the study, in chronological order and in sufficient detail” so that the study is replicable (Gay, 1996, p. 547). Assumption is being made such as “time and conditions of pretest administration being described and followed by a detailed explanation of the study itself” (Gay, 1996, p. 547). Any unforeseen events which occurred might have affected the results should be discussed in terms of their seriousness and probable consequences also describing (Gay, 1996, p. 547).

The third section of the main body is results. The results section “presents the data and the statistical analyses without discussing the implications of the findings” (Best & Kahn, 1993, p.66). All relevant findings are presented in single subject or very small sample size including those does not support the hypothesis (Best & Kahn, 1993, p.67). The statistical technique is described and applied to the data, preselected α levels, and the results of each analysis. Tables, figures and graph form are used to present findings in summary and clarify the presentation

(Gay, 1996, p. 548). It is useful when “the data cannot readily be presented in a few sentences in the text” (Best & Kahn, 1993, p. 66).

Finally, the report’s main body concludes with the discussion section. The implications of the study are determined including either the hypotheses are supported or should be rejected. Theoretical implications and practical applications of the study are discussed (Best & Kahn, 1993, p. 66). Limitations of the present investigation and proposals for future research are briefly presented.

On the other hand, the reference section begins with a new page (Best & Kahn, 1993, p. 66). All the resources involving journal articles, books, chapters, technical reports, computer programs and unpublished works that are mentioned in the text of the manuscript in alphabetically are listed (Best & Kahn, 1993; Gay, 1996).

The report is concluded with a new page with the label “appendices” which include less important or too lengthy data to be included in the main body of the report such as tests, questionnaires, raw data, and data analysis sheets (Gay, 1996; Best & Kahn 1993).

2.2.2 Journal Article

According to Ary, Jacobs and Razavieh (1990), the contents and format of a journal article follows the same general outline as a thesis or dissertation. However, the journal article is much shorter (Gay 1996; Ary, Jacobs & Razavieh, 1990; Creswell, 2002). Creswell (2002) states that a journal article is “a polished, shorter research report that has been sent to an editor of a journal, accepted for inclusion, and published in a volume of the journal” (p. 292) and Ary, Jacobs and Razavieh (1990) explain that it “requires only communication of the author’s contribution to knowledge” (p. 499).

In the journal article, Ary, Jacobs and Razavieh (1990) describe that “only those results and arguments for the basis for the problem” are contained in related-literature section (p. 499). The article “begins with hypothesis and the general statement of the problem is given in one paragraph or possibly even omitted” (Ary, Jacobs & Razavieh, 1990, p. 499). They also explicate that “the procedures section is also presented very briefly” (p. 499). The greatest interest to the reader will be the results section and therefore will represent a greater proportion of the article than it would be in a dissertation (Ary, Jacobs & Razavieh, 1990, p. 499). They also explain “the most important findings would be discussed in any detail” (p. 499).

The abstract of a journal is between 100 and 150 words and is submitted on a separate sheet (Gay, 1996, p. 552). The abstract is and precedes the complete description of the study when published (Gay, 1996, p. 552). The preliminary pages are not part of the manuscript whereas a footnote in the manuscript contains the copies of tests and other materials will be included in appendixes (Gay, 1996, p. 552).

2.2.3 Conference Paper

A conference paper is a “research report presented to an audience at a state, regional, national, or international typically sponsored by professional associations (e.g, American Educational Research Association, American Association of Teacher Educators)” (Creswell, 2002, p. 293). The format of a research report presented at meetings is the same with all other report (Gay, 1996) but is less than a journal article and is more precisely geared to its audience (Ary, Jacobs & Razavieh, 1990). Ary, Jacobs & Razavieh (1990) explain that the paper is started with “direct statement of the hypothesis” (p. 500). This is followed by “brief description of the procedures” (p. 500). Last section of the paper is reporting the “findings, conclusions and implications” (p. 500).

The time allocated for reading a paper is less than 15 minutes (Ary, Jacobs &